REMARKS

Applicant has cancelled claim 41 without prejudice to prosecution in another application. Applicant has amended claims 31, 38, 46 and 52 to 69 primarily to correct typographical errors. Claim 41 has been cancelled because it contained repetitive terminology. Claim 74 has been added as a replacement for claim 41. New claims 70 to 81 have been added to claim the invention with more particularity. Support for these claims is discussed below. No new matter has been added. Claims 31 to 40 and 42 to 81 are pending in this application.

Support for the ratio of lipid to surfactant of from about 5:1 to about 1:5 is provided at page 6 and Examples 76 to 91. Support for the ratio of lipid to surfactant of from about 12:1 to about 1:8 is provided at Examples 99-107 and 201-215. Support for the insulin range in claims 72 and 77 is found at Example 236. Support for the radius of transfersomes recited in claims 73 and 78 is found at Examples 21-31.

New claim 75 recites a ratio of lipid to surfactant greater than that ratio at a first maximum permeability resistance and less than that ratio attained at second maximum permeability resistance. Additionally, new claim 81 calls for a further method step of varying the ratio of lipid to surfactant in said transfersomes to obtain a first maximum permeability resistance, increasing the amount of surfactant relative to said lipid until a second maximum permeability resistance is obtained, and manufacturing transfersomes having a ratio of surfactant to lipid which is greater than the ratio of surfactant to lipid attained at said first maximum permeability resistance and which is less than that attained at said second maximum permeability resistance. Support for claims 75 and 81 is found in numerous examples, and particularly at Examples 1-13, pages 106-107 (see discussion regarding "permeation").

Applicant respectfully request entry of this amendment and an early and favorable action

on the merits is earnestly solicited.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned "Marked up Version to Show Changes Made".

The Examiner is requested to contact the undersigned if a telephone interview will advance the prosecution of this case.

Respectfully submitted,
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I hereby certify that this correspondence and/or documents referred to as attached therein and/or fee are being deposited with the United States Postal Service as "first class mail" in an envelope with sufficient postage addressed to "Assistant Commissioner for Patents, Washington, D.C. 20231" on September 28, 2001.

DAVIDSON, DAVIDSON & KAPPEL, LLC

By:

MARKED UP VERSION TO SHOW CHANGES MADE

31. (Twice Amended) A preparation suitable for transporting active agents through permeability barriers, comprising a plurality of transfersomes in a medium, said transfersomes comprising a pharmaceutically acceptable lipid and a pharmaceutically acceptable surfactant which is compatible with said lipid, the ratio of said lipid to said surfactant enabling said transfersomes to undergo sufficient deformation to enable said transfersomes to pass as an entity through a permeability barrier which has pores smaller than the size of said transfersomes, wherein the total concentration of said lipid in said medium is from about 0.1% to about 30%, by weight and the ratio of lipid to surfactant is from about [5.5:1] 5:1 to about 1:500.

38. (Amended) Preparation as claimed in claim 31, wherein the total concentration of said lipid in said medium for application on plants is between 0.000001 [through] to 10 weight-%.

46. (Amended) A method of manufacturing preparations for the transport of agents through permeability barriers:

(A) forming transfersomes by combining a lipid and a surface active agent that can solubilize said lipid in a suitable medium and determining the ratio of lipid to surface active agent which enables transfersomes formed by combining said lipid and said surface active agent in said medium to undergo sufficient deformation to enable said transfersomes to pass as an entity through a permeability barrier which has pores smaller than the size of said transfersomes, and

(B) preparing said transfersomes in said medium such that the total concentration of said lipid in said medium is from about 0.1% to about 30%, by weight.

52. (Amended) [Preparation] Method as claimed in claim 46 wherein said transfersomes

have a double layer structure.

53. (Amended) [Preparation] Method as claimed in claim 46, wherein said lipid is a synthetic lipid.

54. (Amended) [Preparation] Method as claimed in claim 46, wherein said lipid comprises a glyceride.

55. (Amended) [Preparation] Method as claimed in claim 46, wherein said lipid is selected from the group consisting of glycerophospholipid, isoprenoidlipid, sphingolipid, a sulfur-containing lipid, and a carbohydrate-containing lipid.

56. (Amended) [Preparation] Method as claimed in claim 46, wherein said lipid comprises a fatty acid.

58. (Amended) [Preparation] Method as claimed in claim 46, wherein said lipid is selected from the group consisting of phosphatidylcholine, phosphatidylethanolamine, phosphatidyglycerol, phosphatidylinositol, phosphatidic acid, phosphatidylserine, sphingomyeline, sphingophospholipid, glycosphingolipid, cerebroside, ceramidepolyhexoside, sulfatide, sphingoplasmalogene, a ganglioside, and a glycolipid.

58. (Amended) [Preparation] Method as claimed in claim 46, wherein said lipid is selected from the group consisting of dioleoyl lipid, dilinoleyl lipid, dilinolenyl lipid, dilinolenoyl lipid, diarachidoyl lipid, dimyristoyl lipid, dipalmitoyl lipid, distearoyl lipid, phospholipid, diacyl lipid and dialkyl lipid.

59. (Amended) [Preparation] Method as claimed in claim 31, wherein surfactant is selected from the group consisting of nonionic surfactants, zwitterionic surfactants, anionic surfactants and cationic surfactants.

60. (Amended) [Preparation] Method as claimed in claim 31, wherein said surfactant is selected from the group consisting of a long-chain fatty acid, a long-chain fatty alcohol, an alkyl-trimethyl-ammonium-salt, an alkylsulfate salt, [a] a cholate-, [a] a deoxycholate-, [a] a glycodeoxycholate-, taurodeoxycholate, dodecyl-dimethyl-aminoxide, decanoyl-N-methylglucamide, dodecanoyl-N-methylglucamide, N-dodecyl-N, N-dimethylglycine, 3-(hexadecyldimethylammonio)-propane-sulfonate, N-hexadecyl-sulfobetaine, nonaethylene-glycoloctylphenylether, nonaethylene-dodecylether, octaethyleneglycol-isotridecylether, octaethylenedodecylether, polyethlene glycol-20-sorbitanemonolaurate, polyhydroxyethylene-cetylstearyl ether polyhydroxyethylene-4-laurylether, polyhydroxyethylene-23-laurylether, polyhydroxyethylene-8-stearate, polyhydroxyethylene-40-stearate, polyhydroxyethylene-100-stearate, polyethoxylated castor oil 40, polyethoxylated hydrated castor oil, sorbitanemonolaurate, lauryl-salts, oleoylsulfate-salts, sodium deoxycholate, sodium glycodeoxycholate, sodium oleate, sodium elaidate, sodium linoleate, sodium laurage, nonaethylene-dodecylether, polyethylene glycol-20-sorbitane-monooleate, polyhydroxyethylene-23-laurylether, polyhydroxyethylene-40-stearate, a sorbitane phospholipid, a monolaurate phospholipid, and [a] a lysophospholipid.

61. (Amended) [Preparation] Method as claimed in claim 35, wherein said agent comprises 1 through 500 I.U. insulin/ml.

62. (Amended) [Preparation] Method as claimed in claim 35, wherein said agent comprises between 20 and 100 I.U. insulin/ml .

63. (Amended) [Preparation] Method as claimed in claim 31, wherein the total concentration of said lipid in the preparation is between 0.1 through 20 [weight-%] % by weight.

64. (Amended) [Preparation] Method as claimed in claim 31, wherein the total concentration

of said lipid in the preparation is between 0.5 and 15 [weight-%] % by weight.

65. (Amended) [Preparation] Method as claimed in claim 31, wherein the concentration of said lipid in the preparation is between 2.5 and 10 [weight-%] % by weight.

66. (Amended) [Preparation] Method as claimed in claim 31, wherein said lipid is selected from the group consisting of phosphatidylcholine and phosphatidylglycol.

67. (Amended) [Preparation] Method as claimed in claim 31, wherein said surfactant is selected from the group consisting of lysophosphatidic acid, lysophosphoglycerol, deoxycholate, glycodeoxycholate, laurate, myristate, oleate, palmitoleate, phosphate salts thereof, sulfate salts thereof, a Tween-surfactant and a Myrj-surfactant.

68. (Amended) [Preparation] Method as claimed in claim 31, wherein the radius of said transfersomes in the preparation is between approximately 50 and approximately 200 nm.

69. (Amended) [Preparation] Method as claimed in claim 31 wherein the radius of said transfersomes in the preparation is between approximately 100 and approximately 180 nm.